

**FOCUSED SITE INSPECTION PRIORITIZATION
ENCLOSURES 1 AND 2**

**SERVICE DISPOSAL NO. 1
JUNCTION STATE ROUTE 316 AND LOXA ROAD
MATTOON, ILLINOIS**

CERCLIS ID NO.: ILD980901433

US EPA RECORDS CENTER REGION 5



548444

Prepared for:

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
SITE ASSESSMENT SECTION
77 West Jackson Boulevard
Chicago, Illinois 60604**

Date Prepared: September 29, 1995
U.S. EPA Region: 5
Contract No.: 68-W0-0037
Technical Direction Document No.: T05-9503-230
Prepared by: Ecology and Environment, Inc.
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ENCLOSURE 1

**U.S. ENVIRONMENTAL PROTECTION AGENCY
RECOMMENDATION FOR
SERVICE DISPOSAL NO. 1
CERCLIS ID NO.: ILD980901433**

U.S. ENVIRONMENTAL PROTECTION AGENCY RECOMMENDATION

Site Name: Service Disposal No. 1
Mattoon, Coles County, Illinois

CERCLIS ID No.: ILD980901433

Report Author: Chad Eich
Ecology and Environment, Inc.
716/684-8060

Program Leader: Steven Skare
Ecology and Environment, Inc.
312/663-9415

U.S. EPA RECOMMENDATION

SIGNATURE

DATE

"H": High priority for further site assessment

"L": Low priority for further site assessment

"D": Deferred to other authority (RCRA,
TSCA, OR NRC)

"N": No further action

Doni M. Vega

9/29/95

U.S. EPA COMMENTS:

Under St authority

ENCLOSURE 2

**TRANSMITTAL MEMORANDUM
WITH HRS SCORESHEETS
FOR
SERVICE DISPOSAL NO. 1
MATTOON, ILLINOIS**

MEMORANDUM

DATE: September 29, 1995

TO: Sonia Vega, U.S. EPA

FROM: Chad Eich, E & E

SUBJECT: Focused Site Inspection Prioritization (FSIP)
Site Name: Service Disposal No. 1
Location: Mattoon, Illinois
CERCLIS ID No.: ILD980901433

THIS DOCUMENT IS CONFIDENTIAL. Because of its predecisional nature, this memorandum and the attached preliminary Hazard Ranking System (HRS) scoresheets are not to be released to the public.

The FSIP Site Evaluation Report (SER) accompanies this transmittal memorandum and the preliminary HRS scoresheets.

The site has been evaluated to determine the need for immediate removal action as a result of a substantial threat to human health and the environment. E & E recommends the following:

- ☐ The site **does** present a threat that requires immediate removal action.
- ☒ The site **does not** present a threat that requires immediate removal action.

E & E has prepared the attached preliminary HRS site scoresheets for the above-referenced site.

- ☒ The preliminary HRS score is **below** 28.50.
- ☐ The preliminary HRS score is **above** 28.50.

The following is a summary of factors affecting the preliminary HRS pathway scores.

WASTE CHARACTERISTICS

The waste characteristics value includes the following factors: hazardous waste quantity, toxicity, and as appropriate to the pathway being evaluated, mobility, persistence, and/or bioaccumulation potential.

The Service Disposal No. 1 (SD1) site is currently a closed and covered landfill. The site has been inactive since 1982. Surface soil, sediment, surface water, and groundwater samples have been collected and analyzed for Target Compound List (TCL) and Target Analyte List (TAL) chemicals by the Illinois Environmental Protection Agency (IEPA). Soil samples collected from the site have shown levels of TCL/TAL chemicals including 2-methylphenol, acetone, phenol, and lead.

A hazardous waste quantity value of 100 was obtained based on the area of the landfill, which was estimated to be 1,742,400 square feet, and the hazardous substances detected in the soil samples.

GROUNDWATER MIGRATION PATHWAY

A release of hazardous substances from the SD1 site to the groundwater has not been conclusively documented. There is no documentation of on-site hazardous waste disposal or mismanagement. No monitoring wells exist on site. A monitoring well located south of the site, on Western Lion Landfill property, showed levels of benzene, phenol, 2-chlorophenol, and mercury. No background samples were collected. The approximately 1,171 residents living within a 4-mile radius of the site obtain drinking water from private groundwater wells. Of these wells, the closest is located approximately 1,800 feet south of the SD1 site. The Western Lion Landfill lies between the SD1 site and the nearest drinking water well. The wells are reportedly between 40 to 100 feet deep and draw water from the sand and gravel aquifer.

SURFACE WATER MIGRATION PATHWAY

A release of hazardous substances to surface water is likely to have occurred. Leachate has been observed entering Riley Creek from the site on several occasions. Riley Creek flows through the middle of the SD1 site and separates the eastern disposal area from the western disposal area. A fish kill that occurred in Riley Creek in 1979 was attributed to the pumping of leachate from the SD1 site into the creek. Analysis of sediment samples collected from Riley Creek by IEPA during the 1988 SSI detected levels TCL compounds including toluene, total xylenes, and 2-methylphenol. Surface water samples collected from Riley Creek did not exceed Illinois groundwater standards. The only organic compound found above the detection limit was acetone. Acetone was detected in both the upstream and downstream samples. Riley Creek flows in an easterly direction from the site to Kickapoo Creek located approximately 7.5 miles southeast of the site. Kickapoo Creek flows approximately 4.25 miles to the Wabash River. There are no engineered structures currently in place at the SD1 site that would preclude leachate from entering Riley Creek.

The site is located within the 100-year floodplain of Riley Creek. No wetlands, sensitive environments, or drinking water intakes are known to exist along Riley Creek, Kickapoo Creek, or the Wabash River.

SOIL EXPOSURE PATHWAY

Leachate stained soils were observed during the 1995 FSIP site reconnaissance inspection. Soil samples collected from the site have shown levels of TCL/TAL chemicals including 2-methylphenol, acetone, phenol, and lead. The SD1 site is not totally fenced; therefore, site access is not restricted. Signs of recreational use of the site were observed during the 1995 FSIP site reconnaissance. The nearest residence is located approximately 1,800 feet south of the site. Approximately 65 persons live within a 1-mile radius of the SD1 site based on straight-line distances. There are no schools or daycare facilities located within 200 feet of the site.

AIR MIGRATION PATHWAY

A release of hazardous substances to the air has not been documented. Air monitoring conducted with an Organic Vapor Analyzer (OVA) during the FSIP site reconnaissance did not reveal any airborne contaminants above background concentrations in the breathing zone. A reading of 4 ppm was elicited on the OVA at the face of a leachate seep. The site is inactive, and no workers are currently employed at the site. No records of complaints regarding odors are known to exist. Approximately 1,171 persons live within a 4-mile radius of the SD1 site. No sensitive environments that could potentially be affected by releases from the site are located within 4 miles of the site.

Record Information

1. Site Name: Service Disposal #1
(as entered in CERCLIS)
2. Site CERCLIS Number: ILD980901433
3. Site Reviewer: Ecology and Environment, Inc.
4. Date: 7/27/95
5. Site Location: Mattoon/Coles, Illinois
(City/County,State)
6. Congressional District: 22
7. Site Coordinates: Multiple
Latitude: 39°31'10. Longitude: 088°16'45.

Site Description

1. Setting: Rural
2. Current Owner: Private - Industrial
3. Current Site Status: Inactive
4. Years of Operation: Inactive Site,from and to dates: 1966 to 1982
5. How Initially Identified: State/Local Program
6. Entity Responsible for Waste Generation:
 - Other - General Refuse
7. Site Activities/Waste Deposition:
 - Municipal Landfill

Waste Description

8. Wastes Deposited or Detected Onsite:

- Organic Chemicals
- Solvents
- Pesticides/Herbicides
- Metals
- POTW Sludge Waste
- Municipal Waste

Response Actions

9. Response/Removal Actions:

RCRA Information

10. For All Active Facilities, RCRA Site Status:

- Not Applicable

Demographic Information

11. Workers Present Onsite: No

12. Distance to Nearest Non-Worker Individual: > 1/4 - 1/2 Mile

13. Residential Population Within 1 Mile: 65.0

14. Residential Population Within 4 Miles: 1171.0

Water Use Information

15. Local Drinking Water Supply Source:

- Ground Water (within 4 mile distance limit)

16. Total Population Served by Local Drinking Water Supply Source: 1171.0

17. Drinking Water Supply System Type for Local Drinking
Water Supply Sources:

- Private

18. Surface Water Adjacent to/Draining Site:

PREscore 3.0 - PRESCORE.TCL File 07/25/94
NPL Characteristics Data Collection Form
Service Disposal #1 - 08/11/95

PAGE: 3

- Stream
- River

PREscore 3.0 - PRESCORE.TCL File 07/25/94
HRS DOCUMENTATION RECORD
Service Disposal #1 - 08/11/95

PAGE: 1

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Latitude: 39°31'10.

Longitude: 088°16'45.

| | Score |
|---|-------|
| Ground Water Migration Pathway Score (Sgw) | 8.53 |
| Surface Water Migration Pathway Score (Ssw) | 3.20 |
| Soil Exposure Pathway Score (Ss) | 0.00 |
| Air Migration Pathway Score (Sa) | 0.00 |

| | |
|------------|------|
| Site Score | 4.56 |
|------------|------|

NOTE

EPA uses the terms "facility," "site," and "release" interchangeably. The term "facility" is broadly defined in CERCLA to include any area where hazardous substances have "come to be located" (CERCLA Section 109(9)), and the listing process is not intended to define or reflect boundaries of such facilities or releases. Site names, and references to specific parcels or properties, are provided for general identification purposes only. Knowledge regarding the extent of sites will be refined as more information is developed during the RI/FS and even during implementation of the remedy.

| GROUND WATER MIGRATION PATHWAY Factor Categories & Factors | Maximum Value | Value Assigned |
|---|------------------|-------------------|
| Likelihood of Release to an Aquifer Aquifer: Sand and Gravel | | |
| 1. Observed Release | 550 | 550 |
| 2. Potential to Release | | |
| 2a. Containment | 10 | 10 |
| 2b. Net Precipitation | 10 | 3 |
| 2c. Depth to Aquifer | 5 | 5 |
| 2d. Travel Time | 35 | 35 |
| 2e. Potential to Release [lines 2a(2b+2c+2d)] | 500 | 430 |
| 3. Likelihood of Release | 550 | 550 |
| Waste Characteristics | | |
| 4. Toxicity/Mobility | * | 1.00E+04 |
| 5. Hazardous Waste Quantity | * | 100 |
| 6. Waste Characteristics | 100 | 32 |
| Targets | | |
| 7. Nearest Well | 50 | 1.80E+01 |
| 8. Population | | |
| 8a. Level I Concentrations | ** | 0.00E+00 |
| 8b. Level II Concentrations | ** | 0.00E+00 |
| 8c. Potential Contamination | ** | 1.70E+01 |
| 8d. Population (lines 8a+8b+8c) | ** | 1.70E+01 |
| 9. Resources | 5 | 5.00E+00 |
| 10. Wellhead Protection Area | 20 | 0.00E+00 |
| 11. Targets (lines 7+8d+9+10) | ** | 4.00E+01 |
| 12. Targets (including overlaying aquifers) | ** | 4.00E+01 |
| 13. Aquifer Score | 100 | 8.53 |
| GROUND WATER MIGRATION PATHWAY SCORE (Sgw) | 100 | 8.53 |

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

| SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT | Maximum Value | Value Assigned |
|---|------------------|-------------------|
| Likelihood of Release | | |
| 1. Observed Release | 550 | 550 |
| 2. Potential to Release by Overland Flow | | |
| 2a. Containment | 10 | 10 |
| 2b. Runoff | 25 | 1 |
| 2c. Distance to Surface Water | 25 | 25 |
| 2d. Potential to Release by Overland Flow [lines 2a(2b+2c)] | 500 | 260 |
| 3. Potential to Release by Flood | | |
| 3a. Containment (Flood) | 10 | 10 |
| 3b. Flood Frequency | 50 | 25 |
| 3c. Potential to Release by Flood (lines 3a x 3b) | 500 | 250 |
| 4. Potential to Release (lines 2d+3c) | 500 | 500 |
| 5. Likelihood of Release | 550 | 550 |
| Waste Characteristics | | |
| 6. Toxicity/Persistence | * | 4.00E+00 |
| 7. Hazardous Waste Quantity | * | 100 |
| 8. Waste Characteristics | 100 | 3 |
| Targets | | |
| 9. Nearest Intake | 50 | 0.00E+00 |
| 10. Population | | |
| 10a. Level I Concentrations | ** | 0.00E+00 |
| 10b. Level II Concentrations | ** | 0.00E+00 |
| 10c. Potential Contamination | ** | 0.00E+00 |
| 10d. Population (lines 10a+10b+10c) | ** | 0.00E+00 |
| 11. Resources | 5 | 5.00E+00 |
| 12. Targets (lines 9+10d+11) | ** | 5.00E+00 |
| 13. DRINKING WATER THREAT SCORE | 100 | 0.10 |

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

| SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT | Maximum Value | Value Assigned |
|---|------------------|-------------------|
| Likelihood of Release | | |
| 14. Likelihood of Release (same as line 5) | 550 | 550 |
| Waste Characteristics | | |
| 15. Toxicity/Persistence/Bioaccumulation | * | 2.00E+02 |
| 16. Hazardous Waste Quantity | * | 100 |
| 17. Waste Characteristics | 1000 | 10 |
| Targets | | |
| 18. Food Chain Individual | 50 | 2.00E+00 |
| 19. Population | | |
| 19a. Level I Concentrations | ** | 0.00E+00 |
| 19b. Level II Concentrations | ** | 0.00E+00 |
| 19c. Pot. Human Food Chain Contamination | ** | 6.30E-04 |
| 19d. Population (lines 19a+19b+19c) | ** | 6.30E-04 |
| 20. Targets (lines 18+19d) | ** | 2.00E+00 |
| 21. HUMAN FOOD CHAIN THREAT SCORE | 100 | 0.13 |

* Maximum value applies to waste characteristics category.
 ** Maximum value not applicable.

| SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT | Maximum Value | Value Assigned |
|--|------------------|-------------------|
| Likelihood of Release | | |
| 22. Likelihood of Release (same as line 5) | 550 | 550 |
| Waste Characteristics | | |
| 23. Ecosystem Toxicity/Persistence/Bioacc. | * | 5.00E+04 |
| 24. Hazardous Waste Quantity | * | 100 |
| 25. Waste Characteristics | 1000 | 32 |
| Targets | | |
| 26. Sensitive Environments | | |
| 26a. Level I Concentrations | ** | 0.00E+00 |
| 26b. Level II Concentrations | ** | 0.00E+00 |
| 26c. Potential Contamination | ** | 0.00E+00 |
| 26d. Sensitive Environments (lines 26a+26b+26c) | ** | 0.00E+00 |
| 27. Targets (line 26d) | ** | 0.00E+00 |
| 28. ENVIRONMENTAL THREAT SCORE | 60 | 0.00 |
| 29. WATERSHED SCORE | 100 | 0.23 |
| 30. SW: OVERLAND/FLOOD COMPONENT SCORE (Sof) | 100 | 0.23 |

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

| GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT | Maximum Value | Value Assigned |
|--|------------------|-------------------|
| Likelihood of Release to Aquifer Aquifer: Sand and Gravel | | |
| 1. Observed Release | 550 | 550 |
| 2. Potential to Release | | |
| 2a. Containment | 10 | 10 |
| 2b. Net Precipitation | 10 | 3 |
| 2c. Depth to Aquifer | 5 | 5 |
| 2d. Travel Time | 35 | 35 |
| 2e. Potential to Release [lines 2a(2b+2c+2d)] | 500 | 430 |
| 3. Likelihood of Release | 550 | 550 |
| Waste Characteristics | | |
| 4. Toxicity/Mobility/Persistence | * | 1.00E+04 |
| 5. Hazardous Waste Quantity | * | 100 |
| 6. Waste Characteristics | 100 | 32 |
| Targets | | |
| 7. Nearest Intake | 50 | 0.00E+00 |
| 8. Population | | |
| 8a. Level I Concentrations | ** | 0.00E+00 |
| 8b. Level II Concentrations | ** | 0.00E+00 |
| 8c. Potential Contamination | ** | 0.00E+00 |
| 8d. Population (lines 8a+8b+8c) | ** | 0.00E+00 |
| 9. Resources | 5 | 5.00E+00 |
| 10. Targets (lines 7+8d+9) | ** | 5.00E+00 |
| 11. DRINKING WATER THREAT SCORE | 100 | 1.07 |

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

| GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT | Maximum Value | Value Assigned |
|--|------------------|-------------------|
| Likelihood of Release | | |
| 12. Likelihood of Release (same as line 3) | 550 | 550 |
| Waste Characteristics | | |
| 13. Toxicity/Mobility/Persistence/Bioacc. | * | 5.00E+08 |
| 14. Hazardous Waste Quantity | * | 100 |
| 15. Waste Characteristics | 1000 | 320 |
| Targets | | |
| 16. Food Chain Individual | 50 | 1.00E+00 |
| 17. Population | | |
| 17a. Level I Concentrations | ** | 0.00E+00 |
| 17b. Level II Concentrations | ** | 0.00E+00 |
| 17c. Pot. Human Food Chain Contamination | ** | 3.15E-04 |
| 17d. Population (lines 17a+17b+17c) | ** | 3.15E-04 |
| 18. Targets (lines 16+17d) | ** | 1.00E+00 |
| 19. HUMAN FOOD CHAIN THREAT SCORE | 100 | 2.13 |

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

| GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT | Maximum Value | Value Assigned |
|---|------------------|-------------------|
| Likelihood of Release | | |
| 20. Likelihood of Release (same as line 3) | 550 | 550 |
| Waste Characteristics | | |
| 21. Ecosystem Tox./Mobility/Persist./Bioacc. | * | 5.00E+08 |
| 22. Hazardous Waste Quantity | * | 100 |
| 23. Waste Characteristics | 1000 | 320 |
| Targets | | |
| 24. Sensitive Environments | | |
| 24a. Level I Concentrations | ** | 0.00E+00 |
| 24b. Level II Concentrations | ** | 0.00E+00 |
| 24c. Potential Contamination | ** | 0.00E+00 |
| 24d. Sensitive Environments (lines 24a+24b+24c) | ** | 0.00E+00 |
| 25. Targets (line 24d) | ** | 0.00E+00 |
| 26. ENVIRONMENTAL THREAT SCORE | 60 | 0.00 |
| 27. WATERSHED SCORE | 100 | 3.20 |
| 28. SW: GW to SW COMPONENT SCORE (Sgs) | 100 | 3.20 |

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

| SOIL EXPOSURE PATHWAY Factor Categories & Factors RESIDENT POPULATION THREAT | Maximum Value | Value Assigned |
|--|------------------|-------------------|
| Likelihood of Exposure | | |
| 1. Likelihood of Exposure | 550 | 550 |
| Waste Characteristics | | |
| 2. Toxicity | * | 1.00E+02 |
| 3. Hazardous Waste Quantity | * | 10 |
| 4. Waste Characteristics | 100 | 6 |
| Targets | | |
| 5. Resident Individual | 50 | 0.00E+00 |
| 6. Resident Population | | |
| 6a. Level I Concentrations | ** | 0.00E+00 |
| 6b. Level II Concentrations | ** | 0.00E+00 |
| 6c. Resident Population (lines 6a+6b) | ** | 0.00E+00 |
| 7. Workers | 15 | 0.00E+00 |
| 8. Resources | 5 | 0.00E+00 |
| 9. Terrestrial Sensitive Environments | *** | 0.00E+00 |
| 10. Targets (lines 5+6c+7+8+9) | ** | 0.00E+00 |
| 11. RESIDENT POPULATION THREAT SCORE | ** | 0.00E+00 |

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

*** No specific maximum value applies, see HRS for details.

| SOIL EXPOSURE PATHWAY Factor Categories & Factors NEARBY POPULATION THREAT | Maximum Value | Value Assigned |
|--|------------------|-------------------|
| Likelihood of Exposure | | |
| 12. Attractiveness/Accessibility | 100 | 5.00E+01 |
| 13. Area of Contamination | 100 | 1.00E+02 |
| 14. Likelihood of Exposure | 500 | 3.75E+02 |
| Waste Characteristics | | |
| 15. Toxicity | * | 1.00E+02 |
| 16. Hazardous Waste Quantity | * | 10 |
| 17. Waste Characteristics | 100 | 6 |
| Targets | | |
| 18. Nearby Individual | 1 | 0.00E+00 |
| 19. Population Within 1 Mile | ** | 5.00E-02 |
| 20. Targets (lines 18+19) | ** | 5.00E-02 |
| 21. NEARBY POPULATION THREAT SCORE | ** | 1.12E+02 |
| SOIL EXPOSURE PATHWAY SCORE (Ss) | 100 | 0.00 |

* Maximum value applies to waste characteristics category.
 ** Maximum value not applicable.

AIR PATHWAY SCORESHEET
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| AIR MIGRATION PATHWAY Factor Categories & Factors | Maximum Value | Value Assigned |
|--|------------------|-------------------|
| Likelihood of Release | | |
| 1. Observed Release | 550 | 0 |
| 2. Potential to Release | | |
| 2a. Gas Potential to Release | 500 | 0 |
| 2b. Particulate Potential to Release | 500 | 0 |
| 2c. Potential to Release | 500 | 0 |
| 3. Likelihood of Release | 550 | 0 |
| Waste Characteristics | | |
| 4. Toxicity/Mobility | * | 0.00E+00 |
| 5. Hazardous Waste Quantity | * | 0 |
| 6. Waste Characteristics | 100 | 0 |
| Targets | | |
| 7. Nearest Individual | 50 | 0.00E+00 |
| 8. Population | | |
| 8a. Level I Concentrations | ** | 0.00E+00 |
| 8b. Level II Concentrations | ** | 0.00E+00 |
| 8c. Potential Contamination | ** | 0.00E+00 |
| 8d. Population (lines 8a+8b+8c) | ** | 0.00E+00 |
| 9. Resources | 5 | 0.00E+00 |
| 10. Sensitive Environments | | |
| 10a. Actual Contamination | *** | 0.00E+00 |
| 10b. Potential Contamination | *** | 0.00E+00 |
| 10c. Sens. Environments (lines 10a+10b) | *** | 0.00E+00 |
| 11. Targets (lines 7+8d+9+10c) | ** | 0.00E+00 |
| AIR MIGRATION PATHWAY SCORE (Sa) | 100 | 0.00E+00 |

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

*** No specific maximum value applies, see HRS for details.

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: LANDFILL

| | |
|--|----------|
| a. Wastestream ID | |
| b. Hazardous Constituent Quantity (C) (lbs.) | 0.00 |
| c. Data Complete? | NO |
| d. Hazardous Wastestream Quantity (W) (lbs.) | 0.00 |
| e. Data Complete? | NO |
| f. Wastestream Quantity Value (W/5,000) | 0.00E+00 |

WASTE QUANTITY

Service Disposal #1 - 08/11/95

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

| | | | |
|--|-------------------|----------|------------|
| a. Source ID | | LANDFILL | |
| b. Source Type | | Landfill | |
| c. Secondary Source Type | | N.A. | |
| d. Source Vol. (yd3/gal) | Source Area (ft2) | 0.00 | 1742400.00 |
| e. Source Volume/Area Value | | 5.12E+02 | |
| f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b) | | 0.00E+00 | |
| g. Data Complete? | | NO | |
| h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f) | | 0.00E+00 | |
| i. Data Complete? | | NO | |
| k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h) | | 5.12E+02 | |

| Source Hazardous Substances | Depth (feet) | Liquid | Concent. | Units |
|--------------------------------|-----------------|--------|----------|-------|
| Acetone | < 2 | YES | 5.7E-01 | ppm |
| Cresol, p- | < 2 | NO | 3.0E+00 | ppm |
| Phenol | < 2 | YES | 7.4E-01 | ppm |

WASTE QUANTITY

Service Disposal #1 - 08/11/95

3. SITE HAZARDOUS WASTE QUANTITY SUMMARY

| No. Source ID | Migration Pathways | Vol. or Area Value (2e) | Constituent or Wastestream Value (2f,2h) | Hazardous Waste Qty. Value (2k) |
|---------------|--------------------|-------------------------|--|---------------------------------|
| 1 LANDFILL | GW-SW-SE | 5.12E+02 | 0.00E+00 | 5.12E+02 |

WASTE QUANTITY

Service Disposal #1 - 08/11/95

4. PATHWAY HAZARDOUS WASTE QUANTITY AND WASTE CHARACTERISTICS SUMMARY TABLE

| Migration Pathway | Contaminant Values | HWQVs* | WCVs** |
|-------------------------|--------------------------------|--------|--------|
| Ground Water | Toxicity/Mobility 1.00E+04 | 100 | 32 |
| SW: Overland Flow, DW | Tox./Persistence 4.00E+00 | 100 | 3 |
| SW: Overland Flow, HFC | Tox./Persis./Bioacc. 2.00E+02 | 100 | 10 |
| SW: Overland Flow, Env | Etox./Persis./Bioacc. 5.00E+04 | 100 | 32 |
| SW: GW to SW, DW | Tox./Persistence 1.00E+04 | 100 | 32 |
| SW: GW to SW, HFC | Tox./Persis./Bioacc. 5.00E+08 | 100 | 320 |
| SW: GW to SW, Env | Etox./Persis./Bioacc. 5.00E+08 | 100 | 320 |
| Soil Exposure: Resident | Toxicity 1.00E+02 | 10 | 6 |
| Soil Exposure: Nearby | Toxicity 1.00E+02 | 10 | 6 |
| Air | Toxicity/Mobility 0.00E+00 | 0 | 0 |

* Hazardous Waste Quantity Factor Values

** Waste Characteristics Factor Category Values

Note: SW = Surface Water
 GW = Ground Water
 DW = Drinking Water Threat
 HFC = Human Food Chain Threat
 Env = Environmental Threat

| No. | Aquifer ID | Type | Overlaying No. | Inter- Connected with | Likelihood of Release | Targets |
|-----|-----------------|-------|-------------------|-----------------------------|--------------------------|----------|
| 1 | Sand and Gravel | Non K | 0 | 0 | 550 | 4.00E+01 |

Containment

| No. | Source ID | HWQ Value | Containment Value |
|-----|-----------|-----------|-------------------|
| 1 | LANDFILL | 5.12E+02 | 10 |

=====

| | | |
|--|--------------------|----|
| | Containment Factor | 10 |
|--|--------------------|----|

Net Precipitation

Net Precipitation (inches)

N.A.

Aquifer: Sand and Gravel

Type of Aquifer: Non Karst

Overlaying Aquifer: 0

Interconnected with: 0

OBSERVED RELEASE

| No. | Well ID | Well Type | Distance (miles) | Level of Contamination |
|-----|---------|-----------------|---------------------|------------------------|
| 1 | G110 | Monitoring Well | 0.000 | Level I |

| Well No. | Hazardous Substance | Concent. | MCL | Cancer | RFD | Units |
|-------------|---------------------------|----------|---------|---------|---------|-------|
| 1 | Arsenic | 2.0E+01 | 5.0E+01 | 2.0E-02 | 1.1E+01 | ppb |
| 1 | Chloro-3-methylphenol, 4- | 7.8E+01 | 0.0E+00 | 0.0E+00 | 7.0E+04 | ppb |
| 1 | Chlorophenol, 2- | 7.1E+01 | 0.0E+00 | 0.0E+00 | 1.8E+02 | ppb |
| 1 | Mercury | 3.0E-01 | 2.0E+00 | 0.0E+00 | 1.1E+01 | ppb |
| 1 | Phenol | 3.9E+01 | 0.0E+00 | 0.0E+00 | 2.1E+04 | ppb |

=====

| | |
|-------------------------|-----|
| Observed Release Factor | 550 |
|-------------------------|-----|

=====

POTENTIAL TO RELEASE

Containment

Containment Factor 10

Net Precipitation

Net Precipitation Factor 3

Depth to Aquifer

A. Depth of Hazardous Substances 47.00 feet

Documentation for Depth of Hazardous Substances:

Assumption. Permit states that fill will be kept at a minimum of 3 feet above the water table

Reference:

B. Depth to Aquifer from Surface 50.00 feet

C. Depth to Aquifer (B - A) 3.00 feet

Depth to Aquifer Factor 5

Travel Time

Are All Layers Karst? NO

Thickness of Layer(s) with Lowest Conductivity 3.00 feet

Hydraulic Conductivity (cm/sec) 1.0E-05

Travel Time Factor

35

=====

| | |
|-----------------------------|-----|
| Potential to Release Factor | 430 |
|-----------------------------|-----|

Source: 1 LANDFILL

Source Hazardous Waste Quantity Value: 512.47

| Hazardous Substance | Toxicity Value | Mobility Value | Toxicity/ Mobility Value |
|---------------------|-------------------|-------------------|--------------------------------|
| Acetone | 10 | 1.00E+00 | 1.00E+01 |
| Cresol, p- | 100 | 1.00E-02 | 1.00E+00 |
| Phenol | 1 | 1.00E+00 | 1.00E+00 |

Hazardous Substances Found in an Observed Release

| Well No. | Observed Release Hazardous Substance | Toxicity Value | Mobility Value | Toxicity/ Mobility Value |
|-------------|---|-------------------|-------------------|--------------------------------|
| 1 | Arsenic | 10000 | 1.00E+00 | 1.00E+04 |
| 1 | Chloro-3-methylphenol, 4- | 1 | 1.00E+00 | 1.00E+00 |
| 1 | Chlorophenol, 2- | 100 | 1.00E+00 | 1.00E+02 |
| 1 | Mercury | 10000 | 1.00E+00 | 1.00E+04 |
| 1 | Phenol | 1 | 1.00E+00 | 1.00E+00 |

| | |
|---|----------|
| Toxicity/Mobility Value from Source Hazardous Substances: | 1.00E+01 |
| Toxicity/Mobility Value from Observed Release Hazardous Substances: | 1.00E+04 |
| Toxicity/Mobility Factor: | 1.00E+04 |
| Sum of Source Hazardous Waste Quantity Values: | 5.12E+02 |
| Hazardous Waste Quantity Factor: | 100 |
| Waste Characteristics Factor Category: | 32 |

Population by Well

| No. | Well ID | Sample Type | Distance (miles) | Level of Contamination Population |
|-----|---------|-------------|---------------------|--------------------------------------|
|-----|---------|-------------|---------------------|--------------------------------------|

- N/A and/or data not specified

Level I Population Factor: 0.00

Level II Population Factor: 0.00

Potential Contamination by Distance Category

| Distance Category (miles) | Population | Value |
|------------------------------|------------|----------|
| > 0 to 1/4 | 0.0 | 0.00E+00 |
| > 1/4 to 1/2 | 19.0 | 1.10E+00 |
| > 1/2 to 1 | 46.0 | 1.70E+00 |
| > 1 to 2 | 229.0 | 3.00E+00 |
| > 2 to 3 | 347.0 | 6.80E+00 |
| > 3 to 4 | 530.0 | 4.20E+00 |

Potential Contamination Factor: 17.000

Nearest Well

Level of Contamination: Potential
Distance in miles: 0.30

Nearest Well Factor: 1.80E+01

Resources

Resource Use: YES

Resource Factor: 5.00E+00

Wellhead Protection Area

No wellhead protection area

Wellhead Protection Area Factor: 0.00E+00

SURFACE WATER PATHWAY SEGMENT SUMMARY

Service Disposal #1 - 08/11/95

| No. Segment ID | Segment Type | Water Type | Start Point (mi) | End Point (mi) | Average Flow (cfs) |
|------------------|--------------|------------|------------------|----------------|--------------------|
| 1 Riley Creek | River | Fresh | 0.00 | 7.50 | 25 |
| 2 Kickapoo Creek | River | Fresh | 7.50 | 11.75 | 50 |
| 3 Wabash River | River | Fresh | 11.75 | 15.00 | 101 |

OBSERVED RELEASE

| No. | Sample ID | Sample Type | Distance (miles) | Level of Contamination DW | HFC | Env |
|-----|-----------|-------------|---------------------|------------------------------|-----------|----------|
| 1 | S102 | Sediment | 0.000 | Level II | Potential | Level II |

| Sample Hazardous No. | Substance | Concent. | Units |
|-------------------------|-----------|----------|-------|
|-------------------------|-----------|----------|-------|

| | | | |
|---|------------|---------|-----|
| 1 | Toluene | 5.0E+00 | ppb |
| 1 | Xylene, o- | 2.0E+00 | ppb |

=====

| | |
|-------------------------|-----|
| Observed Release Factor | 550 |
|-------------------------|-----|

POTENTIAL TO RELEASE

Potential to Release by Overland Flow

Containment

| No. | Source ID | HWQ Value | Containment Value |
|-----|-----------|-----------|-------------------|
| 1 | LANDFILL | 5.12E+02 | 10 |

=====

Containment Factor: 10

Distance to Surface Water

Distance to Surface Water: 0.0 feet

Distance to Surface Water Factor: 25

Runoff

A. Drainage Area: 40.0 acres

B. 2-year, 24-hour Rainfall: 2.5 inches

C. Soil Group: C
Moderately-fine textured soils with low infiltration rates

Runoff Factor: 1

=====

Potential to Release by Overland Flow Factor: 260

Potential to Release by Flood

| No. | Source ID | HWQ Value | Flood Containment Value | Flood Frequency Value | Potential to Release by Flood |
|-----|-----------|-----------|-------------------------|-----------------------|-------------------------------|
| 1 | LANDFILL | 5.12E+02 | 10 | 25 | 250 |

=====

Potential to Release by Flood Factor: 250

Source: 1 LANDFILL

Source Hazardous Waste Quantity Value: 512.47

| Hazardous Substance | Toxicity Value | Persistence Value | Toxicity/ Persistence Value |
|---------------------|-------------------|----------------------|-----------------------------------|
| Acetone | 10 | 7.00E-04 | 7.00E-03 |
| Cresol, p- | 100 | 7.00E-04 | 7.00E-02 |
| Phenol | 1 | 1.00E+00 | 1.00E+00 |

Hazardous Substances Found in an Observed Release

| Sample No. | Observed Release Hazardous Substance | Toxicity Value | Persistence Value | Toxicity/Persistence Value |
|------------|--------------------------------------|----------------|-------------------|----------------------------|
| 1 | Toluene | 10 | 4.00E-01 | 4.00E+00 |
| 1 | Xylene, o- | 1 | 4.00E-01 | 4.00E-01 |

| | |
|--|----------|
| Toxicity/Persistence Value from Source Hazardous Substances: | 1.00E+00 |
| Toxicity/Persistence Value from Observed Release Hazardous Substances: | 4.00E+00 |
| Toxicity/Persistence Factor: | 4.00E+00 |
| Sum of Source Hazardous Waste Quantity Values: | 5.12E+02 |
| Hazardous Waste Quantity Factor: | 100 |
| Waste Characteristics Factor Category: | 3 |

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

Sample ID: S102

Sample Medium: Sediment

Location: 0.00 miles

| Hazardous Substance | Hazardous Substance Concentration | DW MCL Benchmark Concentration | Units |
|---------------------|---|--------------------------------------|-------|
| Toluene | 5.0E+00 | N.A. | ppb |
| Xylene, o- | 2.0E+00 | N.A. | ppb |

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

Sample ID: S102

Distance from the Probable Point of Entry: 0.00 miles

Level I Concentrations

| Intake | Distance Along the In-water Segment from the Probable Point of Entry (miles) | Population |
|--------|--|------------|
|--------|--|------------|

- N/A and/or data not specified

=====
Population Served by Level I Intakes: 0.0

Level I Population Factor: 0.00E+00

Level II Concentrations

| Intake | Distance Along the In-water Segment from the Probable Point of Entry (miles) | Population |
|--------|--|------------|
|--------|--|------------|

- N/A and/or data not specified

=====
Population Served by Level II Intakes: 0.0

Level II Population Factor: 0.00E+00

Potential Contamination

| Intake ID | Average Annual Flow (cfs) | Population Served |
|-----------|------------------------------|----------------------|
|-----------|------------------------------|----------------------|

- N/A and/or data not specified

| Type of Surface Water Body | Total Population | Dilution-Weighted Population |
|-------------------------------|---------------------|---------------------------------|
|-------------------------------|---------------------|---------------------------------|

- N/A and/or data not specified

=====

| | |
|---|-----|
| Dilution-Weighted Population Served by Potentially Contaminated Intakes: | 0.0 |
|---|-----|

| | |
|---------------------------------|-----|
| Potential Contamination Factor: | 0.0 |
|---------------------------------|-----|

Nearest Intake

Location of Nearest Drinking Water Intake: N.A.

Nearest Intake Factor: 0.00

Resources

Resource Use: YES

Resource Value: 5.00E+00

Source: 1 LANDFILL

Source Hazardous Waste Quantity Value: 512.47

| Hazardous Substance | Toxicity Value | Persistence Value | Bio- accum. Value | Toxicity/ Persistence/ Bioaccum. Value |
|---------------------------|-------------------|----------------------|-------------------------|---|
| Acetone | 10 | 7.00E-04 | 5.00E-01 | 3.50E-03 |
| Arsenic | 10000 | 1.00E+00 | 5.00E+00 | 5.00E+04 |
| Chloro-3-methylphenol, 4- | 1 | 1.00E+00 | 5.00E+01 | 5.00E+01 |
| Chlorophenol, 2- | 100 | 4.00E-01 | 5.00E+02 | 2.00E+04 |
| Cresol, p- | 100 | 7.00E-04 | 5.00E+00 | 3.50E-01 |
| Mercury | 10000 | 1.00E+00 | 5.00E+04 | 5.00E+08 |
| Phenol | 1 | 1.00E+00 | 5.00E+00 | 5.00E+00 |

Hazardous Substances Found in an Observed Release

| Sample No. | Observed Release Hazardous Substance | Toxicity Value | Persistence Value | Bio-accum. Value | Toxicity/Persistence/Bioaccum. Value |
|------------|--------------------------------------|----------------|-------------------|------------------|--------------------------------------|
| 1 | Toluene | 10 | 4.00E-01 | 5.00E+01 | 2.00E+02 |
| 1 | Xylene, o- | 1 | 4.00E-01 | 5.00E+01 | 2.00E+01 |

| | |
|--|----------|
| Toxicity/Persistence/Bioaccumulation Value from Source Hazardous Substances: | 5.00E+00 |
| Toxicity/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances: | 2.00E+02 |
| Toxicity/Persistence/Bioaccumulation Factor: | 2.00E+02 |
| Sum of Source Hazardous Waste Quantity Values: | 5.12E+02 |
| Hazardous Waste Quantity Factor: | 100 |
| Waste Characteristics Factor Category: | 10 |

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

Level I Concentrations

| Fishery | Annual Production (pounds) | Human Food Chain Population Value |
|---------|-------------------------------|--------------------------------------|
|---------|-------------------------------|--------------------------------------|

- N/A and/or data not specified

=====

Sum of Human Food Chain Population Values: 0.00E+00

Level I Concentrations Factor: 0.00E+00

Level II Concentrations

| Fishery | Annual Production (pounds) | Human Food Chain Population Value |
|---------|-------------------------------|--------------------------------------|
|---------|-------------------------------|--------------------------------------|

- N/A and/or data not specified

=====

Sum of Human Food Chain Population Values: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Potential Contamination

| Fishery | Annual Production (pounds) | Type of Surface Water Body | Average Annual Flow (cfs) | Pop. Value (Pi) | Dilution Weight (Di) | Pi*Di |
|------------------|----------------------------------|-------------------------------------|------------------------------------|-----------------------|----------------------------|----------|
| 1 Riley Creek | 1.0 | River | 25 | 0.0 | 1.00E-01 | 3.00E-03 |
| 2 Kickapoo Creek | 1.0 | River | 50 | 0.0 | 1.00E-01 | 3.00E-03 |
| 3 Wabash River | 1.0 | River | 101 | 0.0 | 1.00E-02 | 3.00E-04 |

=====

Sum of (Pi*Di): 6.30E-03

Potential Human Food Chain Contamination Factor: 6.30E-04

Food Chain Individual

Location of Nearest Fishery: Riley Creek
 Distance from the Probable Point of Entry: 0.00 miles
 Type of Surface Water Body: River
 Dilution Weight: 0.1000000
 Level of Contamination: Potential

Food Chain Individual Factor: 2.00

Source: 1 LANDFILL

Source Hazardous Waste Quantity Value: 512.47

| Hazardous Substance | Eco- toxicity Value | Persistence Value | Bio- accum. Value | Ecotoxicity/ Persistence/ Bioaccum. Value |
|---------------------------|---------------------------|----------------------|-------------------------|--|
| Acetone | 100 | 7.00E-04 | 5.00E-01 | 3.50E-02 |
| Arsenic | 10 | 1.00E+00 | 5.00E+01 | 5.00E+02 |
| Chloro-3-methylphenol, 4- | 100 | 1.00E+00 | 5.00E+01 | 5.00E+03 |
| Chlorophenol, 2- | 100 | 4.00E-01 | 5.00E+02 | 2.00E+04 |
| Cresol, p- | 100 | 7.00E-04 | 5.00E+00 | 3.50E-01 |
| Mercury | 10000 | 1.00E+00 | 5.00E+04 | 5.00E+08 |
| Phenol | 10000 | 1.00E+00 | 5.00E+00 | 5.00E+04 |

Hazardous Substances Found in an Observed Release

| Sample No. | Observed Release Hazardous Substance | Eco-toxicity Value | Persistence Value | Bio-accum. Value | Ecotoxicity/Persistence/Bioaccum. Value |
|------------|--------------------------------------|--------------------|-------------------|------------------|---|
| 1 | Toluene | 100 | 4.00E-01 | 5.00E+01 | 2.00E+03 |
| 1 | Xylene, o- | 100 | 4.00E-01 | 5.00E+01 | 2.00E+03 |

| | |
|--|----------|
| Ecotoxicity/Persistence/Bioaccumulation Value from Source Hazardous Substances: | 5.00E+04 |
| Ecotoxicity/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances: | 2.00E+03 |
| Ecotoxicity/Persistence/Bioaccumulation Factor: | 5.00E+04 |
| Sum of Source Hazardous Waste Quantity Values: | 5.12E+02 |
| Hazardous Waste Quantity Factor: | 100 |
| Waste Characteristics Factor Category: | 32 |

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

Sample ID: S102

Sample Medium: Sediment

Location: 0.00 miles

| Hazardous Substance | Hazardous Substance Concentration | AWQC Benchmarks Concentrations | | Units |
|---------------------|---|-----------------------------------|------|-------|
| | | FRESH | SALT | |
| Toluene | 5.0E+00 | | N.A. | ppb |
| Xylene, o- | 2.0E+00 | | N.A. | ppb |

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

Sample ID: S102

Distance from the Probable Point of Entry: 0.00 miles

Level I Concentrations

| Sensitive Environment | Distance from Probable Point of Entry to Sensitive Env. (miles) | Sensitive Environment Value |
|-----------------------|---|-----------------------------------|
|-----------------------|---|-----------------------------------|

- N/A and/or data not specified

| | |
|---------------------------------------|---|
| Sum of Sensitive Environments Values: | 0 |
|---------------------------------------|---|

Wetlands

| Wetland | Distance from Probable Point of Entry to Wetland (miles) | Wetlands Frontage (miles) |
|---------|--|------------------------------|
|---------|--|------------------------------|

- N/A and/or data not specified

| | | | |
|--------------------------|------------|-----------------------|---|
| Total Wetlands Frontage: | 0.00 Miles | Total Wetlands Value: | 0 |
|--------------------------|------------|-----------------------|---|

=====

| | |
|---|----------|
| Sum of Sensitive Environments Value + Wetlands Value: | 0.00E+00 |
|---|----------|

Level I Concentrations Factor: 0.00E+00

Level II Concentrations

| Sensitive Environment | Distance from Probable Point of Entry to Sensitive Env. (miles) | Sensitive Environment Value |
|---------------------------------|---|-----------------------------------|
| - N/A and/or data not specified | | |

Sum of Sensitive Environments Values: 0

Wetlands

| Wetland | Distance from Probable Point of Entry to Wetland (miles) | Wetlands Frontage (miles) |
|---------------------------------|--|------------------------------|
| - N/A and/or data not specified | | |

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

=====

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Potential Contamination

Sensitive Environments

| Type of Surface | | Sensitive Environment |
|-----------------|-----------------------|-----------------------|
| Water Body | Sensitive Environment | Value |

Wetlands

| Type of Surface | | Wetlands | Wetlands |
|-----------------|-----------------------|----------|----------|
| Water Body | Sensitive Environment | Frontage | Value |

- N/A and/or data not specified

| Type of Surface | Sum of Sens. Environment Values(Sj) | Sum of Wetland Frontage Values(Wj) | Dilution Weight (Dj) | Dj (Wj+Sj) |
|-----------------|-------------------------------------|------------------------------------|----------------------|------------|
| Water Body | | | | |

- N/A and/or data not specified

Sum of Dj (Wj+Sj): 0.00E+00
 Sum of Dj (Wj+Sj)/10: 0.00E+00

=====
 Potential Contamination Sensitive Environment Factor: 0.00E+00

Containment

| No. | Source ID | HWQ Value | Containment Value |
|-------|--------------------|-----------|-------------------|
| 1 | LANDFILL | 5.12E+02 | 10 |
| ===== | | | |
| | Containment Factor | | 10 |

Net Precipitation

| | |
|----------------------------|------|
| Net Precipitation (inches) | 0.00 |
|----------------------------|------|

Aquifer: Sand and Gravel

Type of Aquifer: Non Karst

Overlaying Aquifer: 0

Interconnected with: 0

OBSERVED RELEASE

| No. | Well ID | Well Type | Distance (miles) | Level of Contamination |
|-----|---------|-----------------|---------------------|------------------------|
| 1 | G110 | Monitoring Well | 0.000 | Level I |

| Well No. | Hazardous Substance | Concent. | MCL | Cancer | RFD | Units |
|-------------|---------------------------|----------|---------|---------|---------|-------|
| 1 | Arsenic | 2.0E+01 | 5.0E+01 | 2.0E-02 | 1.1E+01 | ppb |
| 1 | Chloro-3-methylphenol, 4- | 7.8E+01 | 0.0E+00 | 0.0E+00 | 7.0E+04 | ppb |
| 1 | Chlorophenol, 2- | 7.1E+01 | 0.0E+00 | 0.0E+00 | 1.8E+02 | ppb |
| 1 | Mercury | 3.0E-01 | 2.0E+00 | 0.0E+00 | 1.1E+01 | ppb |
| 1 | Phenol | 3.9E+01 | 0.0E+00 | 0.0E+00 | 2.1E+04 | ppb |

=====

| | |
|-------------------------|-----|
| Observed Release Factor | 550 |
|-------------------------|-----|

=====

POTENTIAL TO RELEASE

Ground Water to Surface Water Angle

| | | |
|-------------------------|------|-------|
| Probable Point of Entry | 0.00 | miles |
| Angle Theta | 180 | |

Containment

| | | |
|--------------------|----|--|
| Containment Factor | 10 | |
|--------------------|----|--|

Net Precipitation

| | | |
|--------------------------|---|--|
| Net Precipitation Factor | 3 | |
|--------------------------|---|--|

Depth to Aquifer

| | | |
|----------------------------------|-------|------|
| A. Depth of Hazardous Substances | 47.00 | feet |
|----------------------------------|-------|------|

Documentation for Depth of Hazardous Substances:

Assumption. Permit states that fill will be kept at a minimum of 3 feet above the water table

Reference:

| | | |
|----------------------------------|-------|------|
| B. Depth to Aquifer from Surface | 50.00 | feet |
|----------------------------------|-------|------|

| | | |
|-----------------------------|------|------|
| C. Depth to Aquifer (B - A) | 3.00 | feet |
|-----------------------------|------|------|

| | | |
|-------------------------|---|--|
| Depth to Aquifer Factor | 5 | |
|-------------------------|---|--|

Travel Time

Are All Layers Karst? NO

Thickness of Layer(s) with Lowest Conductivity 3.00 feet

Hydraulic Conductivity (cm/sec) 1.0E-05

Travel Time Factor 35

=====

| | |
|-----------------------------|-----|
| Potential to Release Factor | 430 |
|-----------------------------|-----|

=====

Source: 1 LANDFILL

Source Hazardous Waste Quantity Value: 512.47

| Hazardous Substance | Toxicity Factor Value | Persist. Value | Mobility Value | Toxicity/ Mobility/ Persistence |
|---------------------|-----------------------------|-------------------|-------------------|---------------------------------------|
| Acetone | 10 | 7.00E-04 | 1.00E+00 | 7.00E-03 |
| Cresol, p- | 100 | 7.00E-04 | 1.00E-02 | 7.00E-04 |
| Phenol | 1 | 1.00E+00 | 1.00E+00 | 1.00E+00 |

Hazardous Substances Found in an Observed Release

| Observed Release Hazardous Substance | Toxicity Factor Value | Persist. Value | Toxicity/ Persistence |
|--|-----------------------------|-------------------|--------------------------|
| Arsenic | 10000 | 1.00E+00 | 1.00E+04 |
| Chloro-3-methylphenol, 4- | 1 | 1.00E+00 | 1.00E+00 |
| Chlorophenol, 2- | 100 | 4.00E-01 | 4.00E+01 |
| Mercury | 10000 | 1.00E+00 | 1.00E+04 |
| Phenol | 1 | 1.00E+00 | 1.00E+00 |

| | |
|---|----------|
| Toxicity/Mobility/Persistence Value from Source Hazardous Substances: | 1.00E+00 |
| Toxicity/Mobility/Persistence Value from Observed Release Hazardous Substances: | 1.00E+04 |
| Toxicity/Mobility/Persistence Factor: | 1.00E+04 |
| Sum of Source Hazardous Waste Quantity Values: | 5.12E+02 |
| Hazardous Waste Quantity Factor: | 100 |
| Waste Characteristics Factor Category: | 32 |

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

Level I Concentrations

| Intake | Distance Along the In-water Segment from the Probable Point of Entry (miles) | Population |
|--------|--|------------|
|--------|--|------------|

- N/A and/or data not specified

=====
Population Served by Level I Intakes: 0.0

Level I Population Factor: 0.00E+00

Level II Concentrations

| Intake | Distance Along the In-water Segment from the Probable Point of Entry (miles) | Population |
|--------|--|------------|
|--------|--|------------|

- N/A and/or data not specified

=====
Population Served by Level II Intakes: 0.0

Level II Population Factor: 0.00E+00

Potential Contamination

| Intake ID | Average Annual Flow (cfs) | Population Served |
|-----------|------------------------------|----------------------|
|-----------|------------------------------|----------------------|

- N/A and/or data not specified

| Type of Surface Water Body | Total Population | Dilution-Weighted Population |
|-------------------------------|---------------------|---------------------------------|
|-------------------------------|---------------------|---------------------------------|

- N/A and/or data not specified

=====

| | |
|---|-----|
| Dilution-Weighted Population Served by Potentially Contaminated Intakes: | 0.0 |
|---|-----|

| | |
|---------------------------------|-----|
| Potential Contamination Factor: | 0.0 |
|---------------------------------|-----|

Nearest Intake

Location of Nearest Drinking Water Intake: N.A.

Nearest Intake Factor: 0.00

Resources

Resource Use: YES

Resource Value: 5.00E+00

Source: 1 LANDFILL

Source Hazardous Waste Quantity Value: 512.47

| Hazardous Substance | Toxicity Value | Persist. Value | Mobility Value | Bio- accum. Value | Tox./Mobil./ Persistence/ Bioaccum. Value |
|---------------------------|-------------------|-------------------|-------------------|-------------------------|--|
| Acetone | 10 | 7.00E-04 | 1.00E+00 | 5.00E-01 | 3.50E-03 |
| Arsenic | 10000 | 1.00E+00 | 1.00E-02 | 5.00E+00 | 5.00E+02 |
| Chloro-3-methylphenol, 4- | 1 | 1.00E+00 | 1.00E-02 | 5.00E+01 | 5.00E-01 |
| Chlorophenol, 2- | 100 | 4.00E-01 | 1.00E-02 | 5.00E+02 | 2.00E+02 |
| Cresol, p- | 100 | 7.00E-04 | 1.00E-02 | 5.00E+00 | 3.50E-03 |
| Mercury | 10000 | 1.00E+00 | 2.00E-05 | 5.00E+04 | 1.00E+04 |
| Phenol | 1 | 1.00E+00 | 1.00E+00 | 5.00E+00 | 5.00E+00 |

Hazardous Substances Found in an Observed Release

| Observed Release Hazardous Substance | Toxicity Value | Persist. Value | Bio- accum. Value | Toxicity/ Persistence Bioaccum. Value |
|--|-------------------|-------------------|-------------------------|--|
| Arsenic | 10000 | 1.00E+00 | 5.00E+00 | 5.00E+04 |
| Chloro-3-methylphenol, 4- | 1 | 1.00E+00 | 5.00E+01 | 5.00E+01 |
| Chlorophenol, 2- | 100 | 4.00E-01 | 5.00E+02 | 2.00E+04 |
| Mercury | 10000 | 1.00E+00 | 5.00E+04 | 5.00E+08 |
| Phenol | 1 | 1.00E+00 | 5.00E+00 | 5.00E+00 |

| | |
|--|----------|
| Toxicity/Mobility/Persistence/Bioaccumulation Value from Source Hazardous Substances: | 5.00E+00 |
| Toxicity/Mobility/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances: | 5.00E+08 |
| Toxicity/Mobility/Persistence/Bioaccumulation Factor: | 5.00E+08 |
| Sum of Source Hazardous Waste Quantity Values: | 5.12E+02 |
| Hazardous Waste Quantity Factor: | 100 |
| Waste Characteristics Factor Category: | 320 |

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

Level I Concentrations

| Fishery | Annual Production (pounds) | Human Food Chain Population Value |
|---------|-------------------------------|--------------------------------------|
|---------|-------------------------------|--------------------------------------|

- N/A and/or data not specified

=====

Sum of Human Food Chain Population Values: 0.00E+00

Level I Concentrations Factor: 0.00E+00

Level II Concentrations

| Fishery | Annual Production (pounds) | Human Food Chain Population Value |
|---------|-------------------------------|--------------------------------------|
|---------|-------------------------------|--------------------------------------|

- N/A and/or data not specified

=====

Sum of Human Food Chain Population Values: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Potential Contamination

| Fishery | Annual Production (pounds) | Type of Surface Water Body | Average Annual Flow (cfs) | Pop. Value (Pi) | Dilution Weight (Di) | Pi*Di |
|------------------|----------------------------------|-------------------------------------|------------------------------------|-----------------------|----------------------------|----------|
| 1 Riley Creek | 1.0 | River | 25 | 0.0 | 5.00E-02 | 1.50E-03 |
| 2 Kickapoo Creek | 1.0 | River | 50 | 0.0 | 5.00E-02 | 1.50E-03 |
| 3 Wabash River | 1.0 | River | 101 | 0.0 | 5.00E-03 | 1.50E-04 |

=====
Sum of (Pi*Di): 3.15E-03

Potential Human Food Chain Contamination Factor: 3.15E-04

Food Chain Individual

Location of Nearest Fishery: Riley Creek
Distance from the Probable Point of Entry: 0.00 miles
Type of Surface Water Body: River
Dilution Weight: 0.0500000
Level of Contamination: Potential

Food Chain Individual Factor: 2.00

Source: 1 LANDFILL

Source Hazardous Waste Quantity Value: 512.47

| Hazardous Substance | Eco- toxicity Value | Persist. Value | Mob. Value | Bio- accum. Value | Ecotoxicity/ Mobility/ Persistence/ Bioaccum. Value |
|---------------------------|---------------------------|-------------------|---------------|-------------------------|---|
| Acetone | 100 | 7.00E-04 | 1.00E+00 | 5.00E-01 | 3.50E-02 |
| Arsenic | 10 | 1.00E+00 | 1.00E-02 | 5.00E+01 | 5.00E+00 |
| Chloro-3-methylphenol, 4- | 100 | 1.00E+00 | 1.00E-02 | 5.00E+01 | 5.00E+01 |
| Chlorophenol, 2- | 100 | 4.00E-01 | 1.00E-02 | 5.00E+02 | 2.00E+02 |
| Cresol, p- | 100 | 7.00E-04 | 1.00E-02 | 5.00E+00 | 3.50E-03 |
| Mercury | 10000 | 1.00E+00 | 2.00E-05 | 5.00E+04 | 1.00E+04 |
| Phenol | 10000 | 1.00E+00 | 1.00E+00 | 5.00E+00 | 5.00E+04 |

Hazardous Substances Found in an Observed Release

| Observed Release Hazardous Substance | Eco- toxicity Value | Persist. Value | Bio- accum. Value | Ecotoxicity/ Persistence/ Bioaccum. Value |
|--|---------------------------|-------------------|-------------------------|--|
| Arsenic | 10 | 1.00E+00 | 5.00E+01 | 5.00E+02 |
| Chloro-3-methylphenol, 4- | 100 | 1.00E+00 | 5.00E+01 | 5.00E+03 |
| Chlorophenol, 2- | 100 | 4.00E-01 | 5.00E+02 | 2.00E+04 |
| Mercury | 10000 | 1.00E+00 | 5.00E+04 | 5.00E+08 |
| Phenol | 10000 | 1.00E+00 | 5.00E+00 | 5.00E+04 |

| | |
|--|----------|
| Ecotoxicity/Mobility/Persistence/Bioaccumulation Value from Source Substances: | 5.00E+04 |
| Ecotoxicity/Mobility/Persistence/Bioaccumulation Value from Observed Hazardous Substances: | 5.00E+08 |
| Ecotoxicity/Mobility/Persistence/Bioaccumulation Factor: | 5.00E+08 |
| Sum of Source Hazardous Waste Quantity Values: | 5.12E+02 |
| Hazardous Waste Quantity Factor: | 100 |
| Waste Characteristics Factor Category: | 320 |

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

Level I Concentrations

| Sensitive Environment | Distance from Probable Point of Entry to Sensitive Env. (miles) | Sensitive Environment Value |
|---------------------------------|---|-----------------------------------|
| - N/A and/or data not specified | | |

Sum of Sensitive Environments Values: 0

Wetlands

| Wetland | Distance from Probable Point of Entry to Wetland (miles) | Wetlands Frontage (miles) |
|---------------------------------|--|------------------------------|
| - N/A and/or data not specified | | |

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

=====

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level I Concentrations Factor: 0.00E+00

Level II Concentrations

| Sensitive Environment | Distance from Probable Point of Entry to Sensitive Env. (miles) | Sensitive Environment Value |
|---------------------------------|---|-----------------------------------|
| - N/A and/or data not specified | | |

Sum of Sensitive Environments Values: 0

Wetlands

| Wetland | Distance from Probable Point of Entry to Wetland (miles) | Wetlands Frontage (miles) |
|---------------------------------|--|------------------------------|
| - N/A and/or data not specified | | |

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

=====

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Potential Contamination

Sensitive Environments

| Type of Surface | | Sensitive Environment |
|-----------------|-----------------------|-----------------------|
| Water Body | Sensitive Environment | Value |

Wetlands

| Type of Surface | | Wetlands | Wetlands |
|-----------------|-----------------------|----------|----------|
| Water Body | Sensitive Environment | Frontage | Value |

- N/A and/or data not specified

| Type of Surface | Sum of Sens. Environment Values(Sj) | Sum of Wetland Frontage Values(Wj) | Dilution Weight (Dj) | Dj (Wj+Sj) |
|-----------------|---|---|----------------------------|------------|
| Water Body | | | | |

- N/A and/or data not specified

Sum of Dj (Wj+Sj): 0.00E+00
 Sum of Dj (Wj+Sj)/10: 0.00E+00

=====
 Potential Contamination Sensitive Environment Factor: 0.00E+00

Likelihood of Exposure

No. Source ID Level of Contamination

1 LANDFILL Level II

Likelihood of Exposure Factor: 550

| Source No. | Hazardous Substance | Depth (ft.) | Concent. | Cancer | RFD | Units |
|---------------|------------------------|----------------|----------|---------|---------|-------|
| 1 | Acetone | < 2 | 5.7E-01 | 0.0E+00 | 5.8E+04 | ppm |
| 1 | Cresol, p- | < 2 | 3.0E+00 | 0.0E+00 | 2.9E+03 | ppm |
| 1 | Phenol | < 2 | 7.4E-01 | 0.0E+00 | 3.5E+05 | ppm |

Source: 1 LANDFILL

Source Hazardous Waste Quantity Value: 51.25

| Hazardous Substance | Toxicity Value |
|------------------------|-------------------|
| Acetone | 10 |
| Cresol, p- | 100 |
| Phenol | 1 |

| | |
|--|----------|
| Toxicity Factor: | 1.00E+02 |
| Sum of Source Hazardous Waste Quantity Values: | 5.12E+01 |
| Hazardous Waste Quantity Factor: | 10 |
| Waste Characteristics Factor Category: | 6 |

Targets

| | | | |
|----------------------|----------|--------|------|
| Level I Population: | 0.0 | Value: | 0.00 |
| Level II Population: | 0.0 | Value: | 0.00 |
| Workers: | 0.0 | Value: | 0.00 |
| Resident Individual: | Potentia | Value: | 0.00 |
| Resources: | NO | Value: | 0.00 |

| Terrestrial Sensitive Environment | Value |
|-----------------------------------|-------|
|-----------------------------------|-------|

- N/A and/or data not specified

=====

Terrestrial Sensitive Environments Factor: 0.00

Likelihood of Exposure

| No. Source ID | Level of Contamination | Attractiveness/ Accessibility | Area of Contam. (sq. feet) |
|---------------|------------------------|-------------------------------|----------------------------|
| 1 LANDFILL | Level II | 50 | 1742400 |

Highest Attractiveness/Accessibility Value: 50
 Sum of Eligible Areas Of Contamination (sq. feet): 1742400
 Area of Contamination Value: 100

Likelihood of Exposure Factor Category: 375

| Source No. | Hazardous Substance | Depth (ft.) | Concent. | Cancer | RFD | Units |
|------------|---------------------|-------------|----------|---------|---------|-------|
| 1 | Acetone | < 2 | 5.7E-01 | 0.0E+00 | 5.8E+04 | ppm |
| 1 | Cresol, p- | < 2 | 3.0E+00 | 0.0E+00 | 2.9E+03 | ppm |
| 1 | Phenol | < 2 | 7.4E-01 | 0.0E+00 | 3.5E+05 | ppm |

Source: 1 LANDFILL

Source Hazardous Waste Quantity Value: 51.25

| Hazardous Substance | Toxicity Value |
|------------------------|-------------------|
| Acetone | 10 |
| Cresol, p- | 100 |
| Phenol | 1 |

| | |
|--|----------|
| Toxicity Factor: | 1.00E+02 |
| Sum of Source Hazardous Waste Quantity Values: | 5.12E+01 |
| Hazardous Waste Quantity Factor: | 10 |
| Waste Characteristics Factor Category: | 6 |

Nearby Individual

Population within 1/4 mile: 0.0

Nearby Individual Value: 0.0

Population Within 1 Mile

| Travel Distance Category | Number of People | Value |
|--------------------------|------------------|-------|
| > 0 to 1/4 mile | 0.0 | 0.0 |
| > 1/4 to 1/2 mile | 19.0 | 0.0 |
| > 1/2 to 1 mile | 46.0 | 0.0 |

Population Within 1 Mile Factor: 0.1

AIR PATHWAY LIKELIHOOD OF RELEASE

Service Disposal #1 - 08/11/95

OBSERVED RELEASE

| No. Sample ID | Distance (miles) | Level of Contamination |
|---------------|---------------------|------------------------|
|---------------|---------------------|------------------------|

- N/A and/or data not specified

=====

Observed Release Factor: 0

AIR PATHWAY LIKELIHOOD OF RELEASE

Service Disposal #1 - 08/11/95

Gas Migration Potential

GAS POTENTIAL TO RELEASE

| Source ID | Source Type | Gas Contain. Value (A) | Gas Source Type Value (B) | Gas Migrtn. Potent. Value (C) | Sum (B+C) | Gas Potential to Rel. Value A(B+C) |
|-----------|-------------|------------------------------|------------------------------------|--|--------------|---|
|-----------|-------------|------------------------------|------------------------------------|--|--------------|---|

- N/A and/or data not specified

Gas Potential to Release Factor:

0

Source: LANDFILL

| Gaseous Hazardous Substance | Hazardous Substance Gas Migration Potential Value |
|-----------------------------|--|
| Acetone | 17 |
| Cresol, p- | 11 |
| Phenol | 11 |

Average of Gas Migration Potential Value for 3 Hazardous Substances: 13.000

=====

Gas Migration Potential Value From Table 6-7: 11

AIR PATHWAY LIKELIHOOD OF RELEASE

Service Disposal #1 - 08/11/95

Particulate Migration Potential

PARTICULATE POTENTIAL TO RELEASE

| Source ID | Source Type | Partic. | Partic. | Partic. | Sum (B+C) | Partic. |
|-----------|----------------|--------------------------|--------------------------------|------------------------------------|--------------|---|
| | | Contain. Value (A) | Source Type Value (B) | Migrtn. Potent. Value (C) | | Potential to Rel. Value A(B+C) |

- N/A and/or data not specified

Particulate Potential to Release Factor:

0

Source: LANDFILL

Particulate Hazardous Substance

| Hazardous Substance | Toxicity Value | Gas Mobility Value | Particulate Mobility Value | Toxicity/ Mobility Value |
|---------------------|-------------------|--------------------------|----------------------------------|--------------------------------|
|---------------------|-------------------|--------------------------|----------------------------------|--------------------------------|

Hazardous Substances Found in an Observed Release

| Sample ID | Observed Release Hazardous Substance | Particulate Toxicity/ Mobility Value | Gas Toxicity/ Mobility Value |
|-----------|---|--|------------------------------------|
|-----------|---|--|------------------------------------|

- N/A and/or data not specified

- N/A and/or data not specified

Toxicity/Mobility Value from Observed Release Hazardous
Substances: 0.00E+00

Toxicity/Mobility Factor: 0.00E+00

Sum of Source Hazardous Waste Quantity Values: 0.00E+00

Hazardous Waste Quantity Factor: 0

Waste Characteristics Factor Category: 0

AIR PATHWAY TARGETS

Service Disposal #1 - 08/11/95

Actual Contamination

| No. Sample ID | Distance (miles) | Level of Contamination |
|---------------|---------------------|------------------------|
|---------------|---------------------|------------------------|

- N/A and/or data not specified

Potential Contamination

Distance Categories Subject
to Potential Contamination

Population

Value

| | |
|----------------------------------|--------|
| Potential Contaminantion Factor: | 0.0000 |
| Potential Contaminantion Factor: | 0.0000 |
| Potential Contaminantion Factor: | 0.0000 |
| Potential Contaminantion Factor: | 0.0000 |
| Potential Contaminantion Factor: | 0.0000 |
| Potential Contaminantion Factor: | 0.0000 |
| Potential Contaminantion Factor: | 0.0000 |

doc here

Nearest Individual Factor

Distance in miles: Potentia

- N/A and/or data not specified

doc here

Resources

Resource Value: 4.935386701663272590000000000000000000000000e+257

doc here

Actual Contamination, Sensitive Environments

| Sensitive Environment | Distance (miles) | Sensitive Environment Value |
|---------------------------------|---------------------|-----------------------------------|
| - N/A and/or data not specified | | |

Actual Contamination, Wetlands

| Distance Category | Wetland Acreage | Wetland Acreage Value |
|---------------------------------|--------------------|--------------------------|
| - N/A and/or data not specified | | |

=====
(Sum of Sensitive Environments + Wetlands Values)

| Sensitive Environment | Distance (miles) | Sensitive Environment Value | Distance Weight | Weighted Value/10 |
|---|---|-----------------------------------|--------------------|----------------------|
| (null) | 4.9353858434047461500000000000000000000000e+257 | | | |
| Sum of Sensitive Environments Weighted Values/10: | | | | 0.000 |

| Distance Category | Wetland Acreage | Wetland Acreage Value | Distance Weight | Weighted Value/10 |
|---------------------------------|--------------------|--------------------------|--------------------|----------------------|
| - N/A and/or data not specified | | | | |

doc here